

# **EX7501-B0\_Generic**

Firmware Release Note

V5.18(ACHN.2)C0

Date: February 21 2025  
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## Revision History

| Date       | Release | Author   | Description                    |
|------------|---------|----------|--------------------------------|
| 2023/02/24 | 1.0     | Yuan Lin | FW release for V5.18(ACHN.0)b1 |
| 2023/04/28 | 1.1     | Yuan Lin | FW release for V5.18(ACHN.0)b2 |
| 2023/06/16 | 1.2     | Yuan Lin | FW release for V5.18(ACHN.0)b3 |
| 2023/07/28 | 1.3     | Yuan Lin | FW release for V5.18(ACHN.0)b4 |
| 2023/08/11 | 1.4     | Yuan Lin | FW release for V5.18(ACHN.0)b5 |
| 2023/09/01 | 1.5     | Yuan Lin | FW release for V5.18(ACHN.0)b6 |
| 2023/09/22 | 1.6     | Yuan Lin | FW release for V5.18(ACHN.0)C0 |
| 2023/10/19 | 2.1     | Yuan Lin | FW release for V5.18(ACHN.1)b1 |
| 2023/12/15 | 2.2     | Yuan Lin | FW release for V5.18(ACHN.1)b2 |
| 2024/03/01 | 2.3     | Yuan Lin | FW release for V5.18(ACHN.1)b3 |
| 2024/03/29 | 2.4     | Yuan Lin | FW release for V5.18(ACHN.1)b4 |
| 2024/04/24 | 2.5     | Yuan Lin | FW release for V5.18(ACHN.1)C0 |
| 2024/10/18 | 3.1     | Yuan Lin | FW release for V5.18(ACHN.2)b2 |
| 2025/01/03 | 3.2     | Yuan Lin | FW release for V5.18(ACHN.2)b3 |
| 2025/02/21 | 3.3     | Yuan Lin | FW release for V5.18(ACHN.2)C0 |

## **EX7501-B0\_Generic V5.18(ACHN.2)C0 Release Note**

Date: February 21 2025

### **Supported Platforms:**

Zyxel EX7501-B0

### **Versions:**

Bootbase version : V2.4 | 12/15/2023 16:09:13

Firmware version : V5.18(ACHN.2)C0

Kernel version: 4.19.183

WLAN code version: 17.10.188.75

3G WWAN package version: 1.26

### **Notes:**

Linux console:

# uname -a

# wl ver

# wwanpackage info

## Public Domain Software Announcements

| Open Source<br>Used In<br>Product | Version       | From (Source)                                                                                                                                                             | License Terms | Modified<br>/ Used |
|-----------------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------|
| attr                              | 2.5.1         | <a href="http://savannah.nongnu.org/projects/attr">http://savannah.nongnu.org/projects/attr</a>                                                                           | GPL-2.0-only  | Used               |
| atftp                             | 0.8.0         | <a href="https://sourceforge.net/projects/atftp/">https://sourceforge.net/projects/atftp/</a>                                                                             | GPL-2.0-only  | Modified           |
| Bridge-Utils                      | 1.7.1         | <a href="http://bridge.sourceforge.net">http://bridge.sourceforge.net</a>                                                                                                 | GPL-2.0-only  | Used               |
| BusyBox                           | 1.31.1        | <a href="http://www.busybox.net/">http://www.busybox.net/</a>                                                                                                             | GPL-2.0-only  | Modified           |
| clinkc                            | 2.4           | <a href="http://sourceforge.net/projects/clinkc/">http://sourceforge.net/projects/clinkc/</a>                                                                             | BSD-3-Clause  | Modified           |
| conntrack-<br>tools               | 1.4.5         | <a href="https://git.netfilter.org/conntrack-tools/">https://git.netfilter.org/conntrack-tools/</a>                                                                       | GPL-2.0-only  | Used               |
| dnsmasq                           | 2.85          | <a href="http://www.thekelleys.org.uk/dnsmasq/doc.html">http://www.thekelleys.org.uk/dnsmasq/doc.html</a>                                                                 | GPL-2.0-only  | Modified           |
| dropbear                          | 2024.85       | <a href="http://matt.ucc.asn.au/dropbear/dropbear.html">http://matt.ucc.asn.au/dropbear/dropbear.html</a>                                                                 | MIT           | Modified           |
| ebtables                          | 2.0.10-4      | <a href="http://ebtables.sourceforge.net">http://ebtables.sourceforge.net</a>                                                                                             | GPL-2.0-only  | Modified           |
| eventlog                          | 0.2.10        | <a href="http://git.balabit.hu/?p=bazsi/eventlog-1.0.git;a=summary">http://git.balabit.hu/?p=bazsi/eventlog-1.0.git;a=summary</a>                                         | BSD-3-Clause  | Used               |
| expat                             | 2.6.2         | <a href="http://expat.sourceforge.net/">http://expat.sourceforge.net/</a>                                                                                                 | MIT           | Used               |
| ez-ipupdate                       | 3.0.11b8      | <a href="http://ez-ipupdate.com/">http://ez-ipupdate.com/</a>                                                                                                             | GPL-2.0-only  | Used               |
| gettext                           | 0.19.8.1      | <a href="http://www.gnu.org/software/gettext/">http://www.gnu.org/software/gettext/</a>                                                                                   | GPL-2.0-only  | Used               |
| Glib                              | 2.68.1        | <a href="http://www.gtk.org/">http://www.gtk.org/</a>                                                                                                                     | LGPL-2.0-only | Used               |
| iproute2                          | 2.5.7.0       | <a href="http://repository.timesys.com/buildsources/i/iproute2/">http://repository.timesys.com/buildsources/i/iproute2/</a>                                               | GPL-2.0-only  | Modified           |
| iptables                          | 1.8.5         | <a href="http://www.netfilter.org">http://www.netfilter.org</a>                                                                                                           | GPL-2.0-only  | Modified           |
| json-c                            | 0.13.1        | <a href="https://github.com/json-c/json-c/downloads">https://github.com/json-c/json-c/downloads</a>                                                                       | MIT           | Modified           |
| libedit                           | 20080712-2.11 | <a href="http://pkgs.fedoraproject.org/repo/pkgs/libedit/libedit-20080712-2.11.tar.gz/">http://pkgs.fedoraproject.org/repo/pkgs/libedit/libedit-20080712-2.11.tar.gz/</a> | BSD-3-Clause  | Modified           |
| libffi                            | 3.3           | <a href="http://pkgs.fedoraproject.org/repo/pkgs/libffi/libffi-3.0.11.tar.gz/">http://pkgs.fedoraproject.org/repo/pkgs/libffi/libffi-3.0.11.tar.gz/</a>                   | MIT           | Used               |
| libiconv                          | 1.11.1        | <a href="http://www.gnu.org/software/libiconv/">http://www.gnu.org/software/libiconv/</a>                                                                                 | LGPL-2.0-only | Modified           |
| libnetfilter_co<br>nntrack        | 1.0.7         | <a href="https://git.netfilter.org/libnetfilter_conntrack/">https://git.netfilter.org/libnetfilter_conntrack/</a>                                                         | GPL-2.0-only  | Used               |
| libnetfilter_qu<br>eue            | 1.0.3         | <a href="http://www.netfilter.org/projects/libnetfilter_queue/">http://www.netfilter.org/projects/libnetfilter_queue/</a>                                                 | GPL-2.0-only  | Used               |

|                |           |                                                                                                                                                                         |               |          |
|----------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|
| libnfnethlink  | 1.0.1     | <a href="http://www.netfilter.org/projects/libnetfilter_queue/">http://www.netfilter.org/projects/libnetfilter_queue/</a>                                               | GPL-2.0-only  | Used     |
| libpcap        | 1.9.1     | <a href="http://www.tcpdump.org">www.tcpdump.org</a>                                                                                                                    | BSD-3-Clause  | Used     |
| libtool        | 2.4.6     | <a href="http://www.gnu.org/software/libtool/">http://www.gnu.org/software/libtool/</a>                                                                                 | GPL-2.0-only  | Used     |
| libusb         | 1.0.9     | <a href="http://www.libusb.org/">http://www.libusb.org/</a>                                                                                                             | LGPL-2.1-only | Used     |
| libxml2        | 2.9.12    | <a href="http://xmlsoft.org/sources/">http://xmlsoft.org/sources/</a>                                                                                                   | MIT           | Used     |
| logrotate      | 3.22.1    | <a href="https://launchpad.net/ubuntu/hardy/i386/logrotate/">https://launchpad.net/ubuntu/hardy/i386/logrotate/</a>                                                     | GPL-2.0-only  | Modified |
| mailsend       | 1.17b15   | <a href="https://github.com/muquit/mailsend/">https://github.com/muquit/mailsend/</a>                                                                                   | BSD-3-Clause  | Modified |
| ncurses        | 6.1       | <a href="http://ftp.gnu.org/pub/gnu/ncurses/">http://ftp.gnu.org/pub/gnu/ncurses/</a>                                                                                   | MIT           | Modified |
| net-snmp       | 5.94      | <a href="http://www.net-snmp.org/">http://www.net-snmp.org/</a>                                                                                                         | BSD-3-Clause  | Modified |
| ntfs-3g        | 2022.10.3 | <a href="http://ntfs-3g.org">http://ntfs-3g.org</a>                                                                                                                     | GPL-2.0-only  | Used     |
| ntpclient      | 2007_365  | <a href="http://doolittle.icarus.com/ntpclient/">http://doolittle.icarus.com/ntpclient/</a>                                                                             | GPL-2.0-only  | Modified |
| nghttp2        | 1.57.0    | <a href="https://osdn.net/projects/immortalwrt/storage/sources/nghttp2-1.43.0.tar.xz/">https://osdn.net/projects/immortalwrt/storage/sources/nghttp2-1.43.0.tar.xz/</a> | MIT           | Used     |
| openssl        | 3.2.0     | <a href="http://www.openssl.org">http://www.openssl.org</a>                                                                                                             | OpenSSL       | Modified |
| Popt           | 1.16      | <a href="http://rpm5.org/files/popt/">http://rpm5.org/files/popt/</a>                                                                                                   | MIT           | Modified |
| ppp            | 2.4.3     | <a href="http://www.roaringpenguin.com/pppoe">http://www.roaringpenguin.com/pppoe</a>                                                                                   | GPL-2.0-only  | Modified |
| pure-ftpd      | 1.0.50    | <a href="http://pureftpd.org">http://pureftpd.org</a>                                                                                                                   | ISC           | Modified |
| radvd          | 1.8       | <a href="http://www.litech.org/radvd/">http://www.litech.org/radvd/</a>                                                                                                 | BSD-3-Clause  | Used     |
| readline       | 8.2       | <a href="http://cnswww.cns.cwru.edu/php/chet/readline/rltop.html">http://cnswww.cns.cwru.edu/php/chet/readline/rltop.html</a>                                           | GPL-2.0-only  | Used     |
| samba          | 3.6.25    | <a href="http://www.samba.org/samba/">http://www.samba.org/samba/</a>                                                                                                   | GPL-2.0-only  | Modified |
| Sqlite         | 3460000   | <a href="http://www.sqlite.org/">http://www.sqlite.org/</a>                                                                                                             | Public-Domain | Used     |
| syslog-ng      | 4.7.1     | <a href="http://www.balabit.com/network-security/syslog-ng/">http://www.balabit.com/network-security/syslog-ng/</a>                                                     | GPL-2.0-only  | Used     |
| tcpdump        | 4.99.4    | <a href="http://www.tcpdump.org/">http://www.tcpdump.org/</a>                                                                                                           | BSD-3-Clause  | Used     |
| udhcp          | 0.9.8     | <a href="http://udhcp.busybox.net/">http://udhcp.busybox.net/</a>                                                                                                       | GPL-2.0-only  | Modified |
| usb-modeswitch | 2.1.0     | <a href="http://www.draisberghof.de/usb_modeswitch/">http://www.draisberghof.de/usb_modeswitch/</a>                                                                     | GPL-2.0-only  | Used     |
| WIDE-DHCPv6    | 20080615  | <a href="http://wide-dhcpv6.sourceforge.net/">http://wide-dhcpv6.sourceforge.net/</a>                                                                                   | BSD-3-Clause  | Modified |
| miniupnpd      | 2.3.1     | <a href="https://github.com/miniupnp/miniupnp">https://github.com/miniupnp/miniupnp</a>                                                                                 | BSD-3-Clause  | Used     |
| curl           | 8.7.1     | <a href="https://curl.se/">https://curl.se/</a>                                                                                                                         | MIT           | Modified |
| quagga         | 1.2.4     | <a href="https://github.com/Quagga/quagga">https://github.com/Quagga/quagga</a>                                                                                         | GPL-2.0-only  | Used     |



## Known issues

| Modules | Issue | Risk Impact Information |
|---------|-------|-------------------------|
|         |       |                         |

### [NOTE]

#### 1. OpenSSL 3.1.2 Upgrade Notification

The certificates signed using SHA1 or older/weaker hashes are no longer supported for authenticating servers or clients.

Before upgrading the firmware:

- Please ensure that certificates in your devices are not using weak hashes.
- If weak hashes are detected, kindly update and verify your certificates promptly with stronger hash  
(The minimum recommended hash is SHA256)

## Modifications in V5.18(ACHN.2)C0

Based on V5.18(ACHN.2)b3 to release V5.18(ACHN.2)C0

## Modifications in V5.18(ACHN.2)b3

Based on V5.18(ACHN.2)b2 to release V5.18(ACHN.2)b3

### ● Feature Enhancement

| Modified Modules | Features Enhancement List                                                                                                                                                                                             |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CVE              | [EN18031][CVE] Fixed CVE<br>libxml2 : CVE-2022-23308, CVE-2022-40303, CVE-2024-25062<br>nghttp2 : CVE-2023-35945, CVE-2023-44487<br>pppd : CVE-2006-2194, CVE-2014-3158, CVE-2015-3310, CVE-2018-11574, CVE-2020-8597 |

### ● Bug Fixed

| Modified Modules | Bug Fixed List                                                                                            |
|------------------|-----------------------------------------------------------------------------------------------------------|
| Vulnerability    | [CVE-2024-12009] Zyxel-SI-1591 [Vulnerability] Post-authentication command injection vulnerability in the |

|  |                                                                                                                                                     |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------|
|  | function "ZyEE"<br>[CVE-2024-12010] Zyxel-SI-1592 [Vulnerability] Post-authentication command injection vulnerability in the email sending function |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------|

Modifications in V5.18(ACHN.2)b2

Based on V5.18(ACHN.1)C0 to release V5.18(ACHN.2)b2

● Feature Enhancement

| Modified Modules | Features Enhancement List |
|------------------|---------------------------|
|------------------|---------------------------|

● Bug Fixed

| Modified Modules | Bug Fixed List                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vulnerability    | [CVE-2024-5412][Zyxel-SI-1557][Vulnerability] Unauthenticated heap buffer overflow in the libclinkc library<br>[CVE-2024-38266,38267,38268,38269][Zyxel-SI-1559][Vulnerability] Multiple authenticated buffer overflow vulnerabilities in VMG8825-T50<br>[CVE-2024-8748][Zyxel-SI-1576][Vulnerability] Unauthenticated buffer overflow in VMG8825-T50<br>[CVE-2024-9197][Zyxel-SI-1583][Vulnerability] Buffer overflow and potential command injection vulnerabilities in VMG3625-T50B (Medium) |